#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005139 Address: 333 Burma Road **Date Inspected:** 11-Jan-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Xu Le Feng / Liu Yang **CWI Present:** Yes No **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** TOWER COMPONENTS

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Gady Rao, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing:

Bay 10

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) & the weld designations reviewed are as follows:

NSD1 – SA 33 A / F – 12 to 19 & 34 to 41 NORTH TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

NSD1 – SA 159 D / J – 5, 6, 8, 9, 11, 12, 16, 17, 20, 21, 23, 24 NORTH TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

NSD1 – SA 159 G / J – 1, 2, 4,7, 8, 10, 11, 16, 17, 19, 20, 25, 26 NORTH TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

NSD1 – SA 159 F / J –1, 2, 4, 5, 8, 9, 12, 13, 16, 17, 19, 20, 25, 26 NORTH TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

NSD1 – SA 159 E / J –12, 13, 16, 17, 20, 21, 25, 26 NORTH TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Bay 10

SAW - FCM - Materials:

SAW welding of weld joint WD1- A 467 - 43M - 3 - 11B, A 467 - 43M - 4 - 11B, A 467 - 38M - 4 - 11B, located on; PCMK P1107 – 1A to SA A467. Welder is identified as 215092. ZPMC QC is identified as Wu Ming Kia. The welding variables recorded by QC appeared to comply with the B - T - 4221 - B - U3C - S - 1.

**FCAW** 

FCAW welding of weld joint NSD1-SA 76 F / H – 31, 36, 43,48, 55, 58 located on SKIN-E; LIFT-1; Welder is identified as 040338 / 052075 / 054069 / 057180 / 203477 / 201825. ZPMC QC is identified as Chen Shou Hua. The welding variables recorded by QC appeared to comply with the B-T-2332-TC-U5-F.

**BAY 11** 

SAW - NON - FCM

1)SAW welding of weld joint WSD1-SA 384 A / D – 42B, SA 384 C / D – 4 located on; SKIN-B; LIFT-2. Welder is identified as 047304. ZPMC QC is identified as Li Ming / Xu Li Feng. The welding variables recorded by QC appeared to comply with the B-T -2221-B-U3C-S- 2 & B - T - 2321 - B - P3 - S. 2)SAW welding of weld joint WSD1-SA 298 A / G – 2A located on; SKIN-E; LIFT-2. Welder is identified as 056975. ZPMC QC is identified as Li Ming / Xu Li Feng. The welding variables recorded by QC appeared to comply with the B-T -2221-B-U3C-S- 2.

#### **FCAW**

- 1) FCAW welding of welds joint WSD1-SA 77 A / E 3A, 5B located on SKIN-C; Lift 1. Welder is identified as 053316 / 066239. ZPMC QC is identified as Li Ming / Xu Li Feng. The welding variables recorded by QC appeared to comply with the B-T-2232-TC-U5-F.
- 2) FCAW welding of weld joint WSD1-SA 340 E/F 5, 6; SA 340 D/F 5, 6, located on SKIN-A; LIFT-2; Welder is identified as 068918 / 068929 / 067037 / 040736. ZPMC QC is identified as Xiao Yun / Xu Le Feng. The welding variables recorded by QC appeared to comply with the B-T-2332-TC-P5-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

No relevant conversations

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 134-8257-0045, who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

**Inspected By:** Rao, Gady Quality Assurance Inspector **Reviewed By:** Clifford, William QA Reviewer